WHAT IS CLAIMED IS:

- A fluid heating apparatus comprising:
 - a pump for circulating fluid through a fluid passage;
 - a heating device for heating the fluid;
- a first temperature detecting means for detecting a temperature that changes in accordance with heat generation of the heating device; and
- a second temperature detecting means for detecting a temperature of the fluid,

wherein the second temperature detecting means is disposed downstream from the heating device,

wherein when it is determined that a temperature difference between detected temperatures detected by the first temperature detecting means and the second temperature detecting means exceeds a predetermined level, heating operation of the heating device is stopped.

- 2. The fluid heating apparatus according to claim 1, wherein the first temperature detecting means detects a temperature of a pipe forming the fluid passage.
- 3. The fluid heating apparatus according to claim 1, wherein the first temperature detecting means detects a temperature proximate to a pipe forming the fluid passage.
- 4. The fluid heating apparatus according to claim 1, wherein the heating device heats a portion of a pipe, which forms the fluid

passage, wherein the first temperature detecting means detects a temperature at a position proximate to a downstream portion of the heated portion of the pipe.

- 5. The fluid heating apparatus according to claim 1, wherein the first temperature detecting means is disposed at a position proximate to an upper half of the heating device.
- 6. The fluid heating apparatus according to claim 1, wherein a portion of the fluid passage that is heated by the heating device includes a curved portion, wherein the first temperature detecting means is disposed proximate to the curved portion.
- 7. The fluid heating apparatus according to claim 6, wherein the first temperature detecting means is disposed proximate to an apex of the curved portion.
- 8. A heating apparatus for heating air comprising:
 - a pump for circulating fluid;
 - a heating device for heating the fluid;
- a heat exchanger for performing heat exchange between the air and the fluid heated by the heating device;
- a first sensor for detecting a temperature that changes in accordance with heat generation of the heating device; and
- a second sensor for detecting a temperature of the fluid at a position proximate to a fluid inlet of the heat exchanger,

wherein when a temperature difference between detected

temperatures detected by the first sensor and the second sensor is greater than a predetermined level, heating operation of the heating device is stopped.

- 9. The heating apparatus according to claim 8, further comprising:
 atarget temperature determining means for determining a target
 temperature of the fluid flowing into the heat exchanger; and
 a controlling means for controlling operation of the heating
 device such that the detected temperature of the second sensor reaches
 the target temperature.
- 10. The heating apparatus according to claim 8, wherein the heating device heats a portion of the fluid passage, wherein the first sensor detects a temperature proximate to a downstream portion of the heated portion of the fluid passage.
- 11. The heating apparatus according to claim 8, wherein a portion of the fluid passage heated by the heating device has a curved portion and the first sensor detects a temperature proximate to an apex of the curved portion.